



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,928	03/08/2001	Richard Gong	2916-0127P	5635

2292 7590 06/30/2005

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

RAMAN, USHA

ART UNIT	PAPER NUMBER
----------	--------------

2617

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/800,928	Applicant(s) GONG, RICHARD	
	Examiner Usha Raman	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed April 4th, 2005 have been fully considered but they are not persuasive.

Applicant argues that, "contrary to examiner's allegations, Tomioka nowhere discloses the feature of automatically updating schedule information data based upon information about the overrun of the first event". Applicant continues to argue that, "Soma nowhere discloses identifying a second one of events as being the last one of subset of events from which starting times will be effected by the overrun of the first event". Examiner however alleges that it is *Soma* and not Tomioka that teaches the step of *automatically updating program guide information*. Tomioka has been relied upon for the illustration of an EPG that identifies a first overrun event and a second (last) event affected by the overrun of the first event and additionally identifying the delay of all the programs in between the first and second program events with an offset of the overrun time.

In response to applicant's traversal to examiner's official notice on claim 2, examiner asserts that it is well known to store EPG data in a database format, wherein a database maybe embodied in the form of data entry tables. Furthermore, programs for data entry tables such as Microsoft Excel provide the GUI for management and automatic updating of the data in spreadsheet database (e.g. through use of simple as well as complex mathematical formulae as well as macro commands). Moseley shows a method of automatically generating a updated table entries by selecting a first entry in the table (D1) and selecting a second entry in the

Art Unit: 2617

table (D5) and dragging the cursor to automatically update in all the entries between a first and a second entry. By dragging the cursor up to the i^{th} entry, all entries up to the i^{th} entry, relative to the first selected entry are selected for update. See pages 466-467 in Moseley. Furthermore, grounds of rejection for claim 2 has been updated to incorporate the reference produced as a result applicant's challenge to the Official Notice.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-19, 21-25 and 28, are rejected under 35 U.S.C. 103(a) as being unpatentable over Soma et al. (US Pre Grant Pub. 2004/0205817) in view of Tomioka et al. (US Pat. 6,606,748).

In regards to claims 1, 13, 19, and 23 Soma discloses a computer-implemented method of automatically updating television schedule data for a plurality of serially scheduled events telecast on the same channel (see [0032], [0038], [0042] and [0043]), each event having a start time and a duration (see claim 12, page 7 [0184]), the method comprising;

Selecting a first one of said events that will extend beyond a scheduled duration thereof (see [0032] [0033] [0034]);

Automatically updating schedule information data (i.e. reacting to schedule change) for each of the said subset of events based upon information about said overrun (see [0038], [0042], [0043], [0061]);

Soma lacks the step of Identifying a second one of events as being the last one of a subset of events for which the starting times will be effected by the overrun of the first event; and

Tomioka shows a system where a transmitting end identifies event overrun information for a first event and a second event, being the last event affected by the overrun, where the subset of events between the first and second events are updated by that overrun time. See figures 3 (showing original program schedule), figure 4 (showing the variation data, indicating the event overruns and shift), and figure 5 (showing the reconstituted program schedule), column 20, lines 11-22, column 21, lines 33-53, and lines 1-11.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Soma's system in view of Tomioka's teachings by updating all subsequent events after the first event affected by the over run time. The motivation is to update the program guide schedule with all the events between first and a second event that have been affected by an overrun of the first event.

In further regards to claim 19, a computer-implemented method is a set of program steps when executed on a computer executes the above steps.

In regards to claim 3, the modified system comprises selecting a channel from a plurality of available channels (see Soma: page 1 [0002]) and displaying a

schedule about a plurality of events being displayed and selecting the first event from the channel (see Tomioka: figs 3, 4, 5).

In regards to claim 4, the modified system displays scheduled starting date, starting time and name of the events (see Tomioka: figs 3, 4 and 5)

In regards to claim 5, the modified system displays duration as well as end times (see Tomioka: figs 3 and 5)

In regards to claim 6, the program schedule events are defined in plurality of tables compliant with the DVB/SI standard. The DVB/SI standard sets the guidelines for digital data transmission scheme. See Soma: page 5 [0115]. The data are transmitted as objects in hierarchical table descriptors that show the relationship between the plurality of tables and objects. Java is a well known object oriented language for implementing the program schedule objects using the DBV/SI protocols. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention by implementing the protocol in Java, a language optimized for object oriented data modeling. The schedule information is further represented by copies (i.e. a proposed schedule before registering the updated tables and a un-updated schedule) of java objects from the database. See Soma: page 9-10, [0260]-[0264]

In regards to claim 7, by initiating a change in program schedule, entering into the system a change in program schedule or by transmitting the schedule with changes, all the above steps inherently require the changes to be approved by a user at cable transmission end, prior to the transmission of data.

In regards to claims 8, and 18, the modified system uses digital terrestrial broadcast signal compliant with DVBSI standards each event is DVB/SI EIT data, where the event information (represented by java objects) is overwritten upon approval. The digital broadcast signals compliant with the ATSC standards, where each event is PSIP data.

Official notice is taken that the ATSC sets the standards used in America for digital broadcast signals, while the DVB SI is the European standard for digital broadcasts. Furthermore, the ATSC standard for communicating program guide information is the PSIP.

It would have been obvious to one of ordinary skill in the art to use the ATSC compliant PSIP for transmitting program guide information, in order to comply with the American standards for digital transmission.

In regards to claims 9 and 10, when there is program overrun, the change occurs in airtime, (i.e. start time, duration time) fields that are defined in the EIT. Therefore updating the schedule with overrun data inherently requires updating the time fields (start and duration fields) in the EIT.

In regards to claims 12 and 14, the second event is the last event to be updated; therefore there is no change to the end time of the second event (i.e. start time is delayed, but end time remains the same). The program length in effect is shortened. The event therefore has to be truncated. This scenario is illustrated in Tomioka figure 5, where the news program event is truncated from duration of 30 minutes to 15 minutes.

In regards to claims 11 and 15, the modified system does not comprise the steps of changing the end time of the second event by shifting the last of the plurality of events affected by the overrun in its entirety. Official Notice is taken that it is well known for broadcasters to change the end time of a second event whose duration cannot be truncated. It would have been obvious to one of ordinary skill in the art to further modify the system by shifting the second event in its entirety, when the event cannot be truncated, thereby allowing the viewer to see the second event (i.e. the last of the overrun event) in its entirety. Upon shifting the second event in its entirety, the end time of the second program in addition to the start time is affected by the overrun time.

In regards to claim 16, the telecast is a digital broadcast.

In regards to claim 17, the DVB sets the standards for digital terrestrial broadcast. Therefore, the digital television broadcast can be a terrestrial network.

In regards to claim 21, and 28, the subset of events includes all events between the first and second event, therefore inherently anticipates at least two serially scheduled events, excluding the first event when more than two shows are affected by the delay.

In regards to claims 22, and 24, the system minimizes the amount of program guide data to be input by the operator of the program guide information by the automation process (see [0061]). Therefore, the system inherently comprises a GUI to allow the operator to input the required information.

In regards to claim 25, see claims 12 and 22.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soma et al. (US Pre Grant Pub. 2004/0205817) and Tomioka et al. (US Pat. 6,606,748) as applied to claim 1 above, and further in view of Moseley et al., "Mastering Microsoft Office 97 Professional Edition", 1996.

In regards to claim 2, the modified system of Soma in view of Tomioka shows indicating the overrun delay for each of the events between the first events and second event in the variation data.

The modified system does not comprise the step of indicating the second event by identifying number of events relative to the first event, for which the start times will be delayed by an amount of time corresponding to the overrun.

Moseley discloses the step of indicating a number of fields relative to the first field to be updated with the update formula of first entry by dragging and clicking all the entries up to a second entry. See pages 466, 467, Moseley. This feature allows the selected entries to be automatically updated, with its corresponding formula.

It would have been obvious to further modify the system of Soma in view of Tomioka by indicating the second event by using a GUI to drag and click all entries up to a second event, thereby identifying number of events relative to the first for which the start times will be delayed by the corresponding overrun.

The motivation is to update the start times of each of the affected programs by simply indicating the relative number of all the events affected by the delay, without having to manually specify the same amount of offset for each of the affected programs in the variation data, thereby alleviating complicated and time

consuming tasks during the updating process (also see Soma: page 2 [0038], [0041]-[0044], Moseley page 466-467.).

5. Claims 20, 26 and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Soma et al. (US Pre Grant Pub. 2004/0205817) in view of Tomioka et al. (US Pat. 6,606,748) as applied to claims 1 and 23 above, and further in view of Sugai (US Pre Grant Pub. 2003/0208760).

In regards to claims 20 and 26, the modified system uses a DVB-SI generator for generating data to be transmitted in compliance with DVB standards. Sugai discloses a PSIP generator, for generating new PSIP tables in response to program schedule updates. See abstract. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system, by employing a PSIP generator for transmission of program schedules in compliant with the ATSC standards.

In further regards to claim 26, the system comprises the step of updating PSIP data storage with updated schedule in response to user input. See Soma, [0250] and [0252]).

In regards to claims 27, the EIT contains the time information for events. Therefore updates on program air times are updated in the EIT of the PSIP.

Conclusion

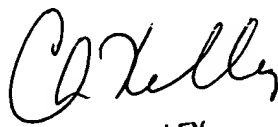
6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

UR